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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/720,262	02/06/2001	Akira Igarashi	201034US0PCT	2400
22850	7590	02/09/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LANGEL, WAYNE A	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 02/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE  
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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT

PAPER NUMBER

DATE MAILED:

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

**OFFICE ACTION SUMMARY**

☒ Responsive to communication(s) filed on 12-28-03

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire \_\_\_\_\_ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

☒ Claim(s) 9-13, 15-19, 21-24 and 26-33 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 9-13, 15-19, 21-24 and 26-33 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d):

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

☐ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) The invention was described in (1) an application for patent, published under Section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 26, 29, 30 and 33 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Jensen et al., for the reasons given in the last Office action.

Claims 27 and 28 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Jensen et al., for the reasons given in the last Office action. Applicant's argument, that even if the Examiner can establish a prima facie case of obviousness over Jensen et al., such as rebutted by the data of the Rule 132 Declaration, is not convincing, since the Rule 132 Declaration has not been executed. In any event, the Rule 132 Declaration does not show unexpected results for employing a catalyst comprising at least platinum and rhenium, both supported on a metal oxide carrier, for the step of dehydrogenating hydrocarbons, as disclosed by Jensen et al. The catalyst of Jensen et al. would be capable of contacting a hydrogen gas having an initial carbon monoxide concentration, to no less extent than with the catalyst recited in applicant's claims 26-30 and 33. Claims 26-30 and 33 do not require that the catalyst be employed for the water gas shift reaction.

Claims 26, 27 and 33 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zhang, for the reasons given in the last Office action.

Claim 28 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Zhang, for the reasons given in the last Office action. Applicant's argument, that the data of the Rule 132 Declaration show that the claimed combination of platinum and

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rhenum is superior, is not convincing, since the Declaration has not been executed. In any event, such Declaration does not provide evidence of superior results for the combination of platinum and rhenum for the step of hydrodechlorination, as disclosed by Zhang. The catalyst of Zhang would be capable of contacting a hydrogen gas having an initial carbon monoxide concentration, to no less extent than would the catalyst recited in applicant's claims 26-28 and 33. Applicant's argument, that the combination of platinum and rhenum is not exemplified by Zhang, is not convincing, since the teachings of Zhang are not limited to the Examples.

Claims 9, 10, 13 and 31 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ou et al., for the reasons given in the last Office action. Applicant's argument, that applicant provides herewith a Rule 132 Declaration showing superior properties of the combination of platinum and rhenum, is not convincing, since such Declaration has not been executed.

Claims 9-13, 15, 18, 19, 21, 24, 31 and 32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Clawson et al., for the reasons given in the last Office action. Applicant's argument, that even if the Examiner can establish a prima facie case of obviousness, such as rebutted by the data of the Rule 132 Declaration, is not convincing, since such Declaration has not been executed.

Claims 11, 12, 15-19, 21-24 and 32 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is indefinite as to whether claim 11 would require the presence of a fuel cell, since line 1 recites "a fuel cell generation system", but there are no positive apparatus limitations in the main body of the claim which would require the presence of a fuel cell. It is also indefinite as to what relationship the recited "hydrogen gas" would have to such fuel cell generation system. The phrase --, and means for supplying said hydrogen gas to a fuel cell-- should be inserted after "gas" in line 4 of claim 11 to avoid this rejection.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE

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ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne A. Langel whose telephone number is (571) 272-1353. The examiner can normally be reached on Monday through Friday from 8 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (571) 272-1358. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-0994.

WAL:cdc

January 28, 2004

*Wayne A. Langel*  
WAYNE A. LANGEL  
PRIMARY EXAMINER